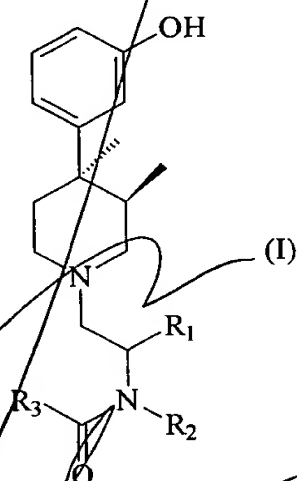


WHAT IS CLAIMED AS NEW AND IS DESIRED TO BE SECURED BY LETTERS
PATENT OF THE UNITED STATES IS:

1. A compound represented by formula (I):



wherein

R₁ is hydrogen, an alkyl group, an aryl group, or an aralkyl group;

R₂ is hydrogen, an alkyl group, an aryl group, or an alkaryl group; and

R₃ is

n is 0 or an integer from 1 to 4;

y is 0 or an integer from 1 to 5;

z is 0 or an integer from 0 to 8; and

R₅ is an alkyl group, alkenyl group, or aralkyl group,
or a pharmaceutically acceptable salt thereof.

18. The compound of Claim 17, wherein

R_a and R_b are each, independently, hydrogen or a C₁₋₈ alkyl group, or R_a and R_b,
together, form a cycloalkyl group;

each X is, independently, a C₁₋₈ alkyl group;

O is a five-membered heteroaryl group or a six-membered aryl or heteroaryl group;

each W is a C₁₋₈ alkyl group;

n is 0, 1 or 2;

y is 0 an integer from 1 to 3;

z is 0 an integer from 1 to 4; and

R₅ is a C₁₋₈ alkyl group, a C₃₋₈ alkenyl group, or an aryl-C₁₋₄ alkyl group.

3 ~~19~~. The compound of Claim ~~18~~², wherein O is a five-membered heteroaryl group
containing up to 3 heteroatoms, a six-membered aryl group or a six-membered
heteroaryl group containing up to three heteroatoms.

4 ~~20~~. The compound of Claim ~~19~~³, wherein the heteroatoms are each, independently,
nitrogen, oxygen or sulfur.

5 ~~21~~. The compound of Claim ~~20~~⁴, wherein

R_a and R_b are each, independently, hydrogen or a C₁₋₄ alkyl group, or R_a and R_b,
together, form a cycloalkyl group;

each X is, independently, a C₁₋₄ alkyl group;

n is 0, 1 or 2;

y is 0, 1 or 2;

z is 0 an integer from 1 to 4; and

R₅ is a C₁₋₈ alkyl group, a C₃₋₈ alkenyl group, or a phenyl-C₁₋₄ alkyl group.

6 22. The compound of Claim ⁵21, wherein

5

O is a six-membered aryl group; and

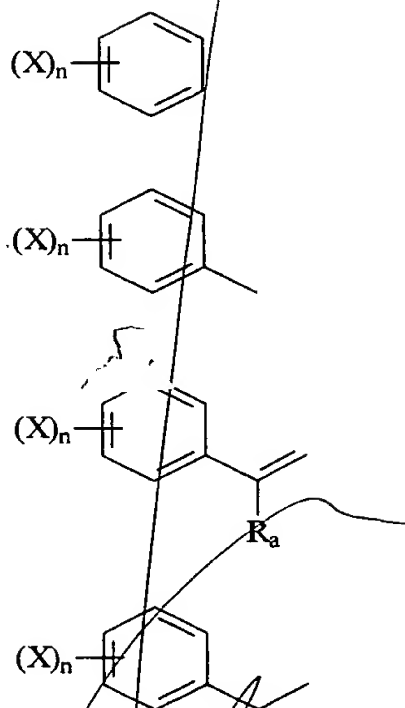
z is an integer from 1 to 4.

23. A method of binding opioid receptors, comprising administering an effective amount of the compound of Claim 1 to a mammalian subject in need thereof.

24. A method of binding opioid receptors, comprising administering an effective amount of the compound of Claim 6 to a mammalian subject in need thereof.

25. A method of binding opioid receptors, comprising administering an effective amount of the compound of Claim 11 to a mammalian subject in need thereof.

7 26. A method of binding opioid receptors, comprising administering an effective amount of the compound of Claim ¹17 to a mammalian subject in need thereof.



each X is, independently, halogen, -OH, -OR, an alkyl group, an aryl group, -NH₂, -NHR, -N(R)₂, -CF₃, -CN or -C(O)NH₂, -C(O)NHR, or -C(O)N(R)₂;

each R is, independently, an alkyl group, an aryl group or an alkaryl group, wherein

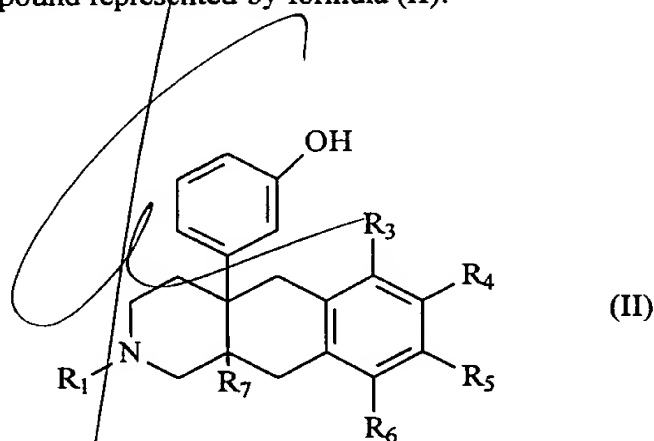
when X is -N(R)₂ the R groups may, together, form a cyclic alkyl group;

n is 0 or an integer from 1 to 5; and

R_a is hydrogen or an alkyl group,

or a pharmaceutically acceptable salt thereof.

2. The compound of Claim 1, wherein
 R_1 is hydrogen, a C_{1-4} alkyl group, a phenyl group, or an aralkyl group;
 R_2 is hydrogen or a C_{1-4} alkyl group; and
 n is 0, 1, 2, 3 or 4.
3. The compound of Claim 2, wherein
 R_1 is hydrogen or a C_{1-4} alkyl group; and
 n is 0, 1, 2, 3 or 4.
4. The compound of Claim 3, wherein
 R_1 is hydrogen or a C_{1-3} alkyl group;
 R_2 is hydrogen or a methyl group;
 n is 1, 2, or 3, and at least one X is $-OH$, $-OCH_3$ or $-F$.
5. The compound of Claim 4, wherein at least one X is $-OH$.
6. A compound represented by formula (II):



- R_1 is an alkyl group or aralkyl group; and
 R_3 , R_4 , R_5 , R_6 are each, independently, hydrogen, an alkyl group, $-OH$, $-NH_2$, $-NHR$, $-N(R)_2$, halogen, $-OR$, $-CF_3$, $-CN$, $-NO_2$, or $-NHC(O)R$, wherein when any of R_3 , R_4 , R_5 , or R_6 is $N(R)_2$ the R groups may, together, form a cyclic alkyl group;

each R is, independently, an alkyl group, an aryl group, or an alkaryl group; and
R₇ is hydrogen or an alkyl group,
or a pharmaceutically acceptable salt thereof.

7. The compound of Claim 6, wherein

R₁ is a C₁₋₈ alkyl group or an aryl-C₁₋₄ alkyl group;

at most three of R₃, R₄, R₅, R₆ are each, independently, an alkyl group, -OH, -NH₂, -NHR, -N(R)₂, halogen, -OR, -CF₃, -CN, -NO₂, or -NHC(O)R; and

R₇ is hydrogen or a C₁₋₈ alkyl group.

8. The compound of Claim 7, wherein

R₁ is a C₁₋₈ alkyl group or a phenyl-C₁₋₄ alkyl group;

at most two of R₃, R₄, R₅, and R₆ are each, independently, an alkyl group, -OH, -NH₂, -NHR, -N(R)₂, halogen, -OR, -CF₃, -CN, -NO₂, or -NHC(O)R;

R₇ is a C₁₋₈ alkyl group.

9. The compound of Claim 8, wherein

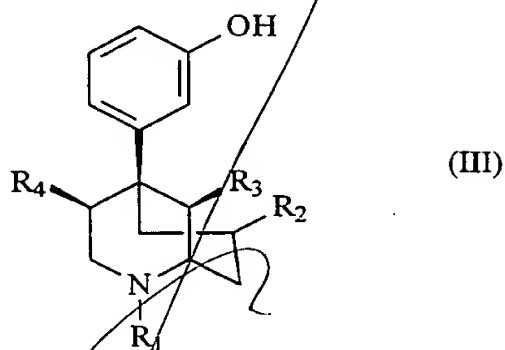
R₁ is a C₁₋₄ alkyl group or an aryl-C₁₋₃ alkyl group;

one of R₃, R₄, R₅, or R₆ is an alkyl group, -OH, -NH₂, -NHR, -N(R)₂, halogen, -OR, -CF₃, -CN, -NO₂, or -NHC(O)R; and

R₇ is a C₁₋₄ alkyl group.

10. The compound of Claim 9, wherein R₃, R₄, R₅, and R₆ are hydrogen.

11. A compound represented by formula (III):



where

R₁ is an alkyl group or an aralkyl group;

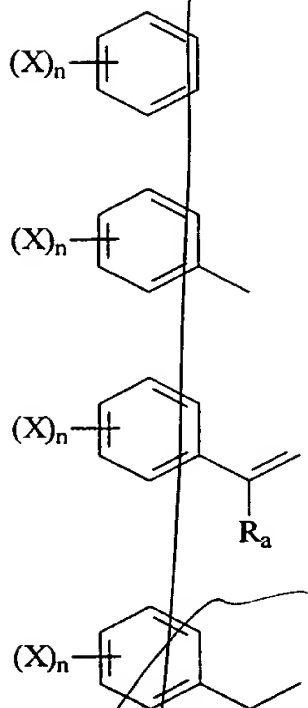
R₂ is hydrogen, an alkyl group, an aralkyl group, =O, -NH₂, -NHR, -N(R)₂,

-NHC(O)R, -NRC(O)R, -NHC(O)R₅, or -NRC(O)R₅;

R₃ and R₄ may be hydrogen or methyl, with the proviso that when R₃ is methyl then R₄ is hydrogen and when R₃ is hydrogen then R₄ is methyl;

each R is, independently, an alkyl group, an aryl group, or an alkaryl group; and

R₅ is



each X is, independently, halogen, -OH, -OR, an alkyl group, an aryl group, -NH₂, -NHR, -N(R)₂, -CF₃, -CN, -C(O)NH₂, -C(O)NHR, or -C(O)N(R)₂;

each R is, independently, an alkyl group, an aryl group, or an alkaryl group;

n is 0 or an integer from 1 to 5; and

R_a is hydrogen or an alkyl group,

or a pharmaceutically acceptable salt thereof.

12. The compound of Claim 11, wherein

R₁ is a C₁₋₈ alkyl group or an aryl-C₁₋₄ alkyl group;

R₃ is methyl; and

R₄ is hydrogen.

13. The compound of Claim 12, wherein R₁ is a C₁₋₈ alkyl group or an phenyl-C₁₋₄ alkyl group.

14. The compound of Claim 11, wherein

R_1 is a C_{1-8} alkyl group or an aryl- C_{1-4} alkyl group;

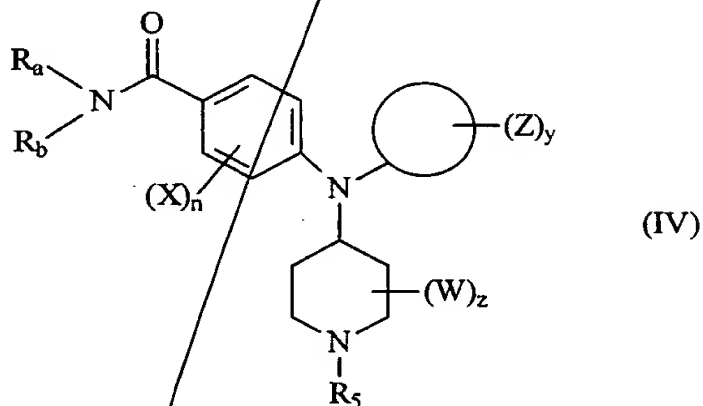
R_3 is hydrogen; and

R_4 is methyl.

15. The compound of Claim 14, wherein R_1 is a C_{1-8} alkyl group or an phenyl- C_{1-4} alkyl group.

16. The compound of Claim 11, wherein R_2 is =O.

17. A compound represented by formula (IV):



where

R_a and R_b are each, independently, hydrogen or an alkyl group, or R_a and R_b , together, form a cycloalkyl group;

each X is, independently, an alkyl group;

○ is a five- or six-membered aryl or heteroaryl group;

each Z is, independently, an alkyl group, -OH, -OR, halogen, -CF₃, -CN, -NH₂, -NHR, or -N(R)₂, wherein when Z is -N(R)₂ the R groups may, together, form a cyclic alkyl group;

each R is, independently, an alkyl group, an aryl group, or an alkaryl group;

each W is an alkyl group;